

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : BECKER, Udo et al. Art Unit : Unknown
Serial No. : NEW U.S. National Stage Examiner : Unknown
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Title : INTRINSICALLY SAFE DATA TRANSMISSION DEVICE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT TO THE CLAIMS OF THE INTERNATIONAL APPLICATION
UNDER PCT ARTICLE 19 (35U.S.C. 371(c)(3))

File number: PCT/EP2004/013778
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Patent Claim

1. Data transmission device (5) with at least one data adaptation device (6) that is connected to at least one process control computer (2) and at least one data distributing device (7) that is connected to at least one field unit (4, 17, 18), wherein the data transmission device is connected between the process control computer (2) and the field unit (4) connected thereto via a bus system (3), wherein the process control computer (2) and field units (4) are parts of a process control system (1) and the data transmission device (5) is intrinsically safe,

characterised in that

the data adaptation device (6) and its assigned supply devices (8) are formed so that they are explosion proof and each supply device (8) is connected to the data distributing device (7) via an explosion-proof line, wherein this data distributing device or field units (4, 17, 18) connected thereto have a barrier device (10, 11) for limiting the applied power.

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